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B.P.M. in transition economies: joint empirical experience of Slovenia and Serbia

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ABSTRACT

Business process management (B.P.M.) is empirically linked to the performance of organisations. Different studies in the business process field have shown that an organisation can benefit from B.P.M. through better financial and nonfinancial performance, which can drive it to competitive advantage. B.P.M. is also a concept which leads to better organised systems and can help companies in transition economies to perform better. The purpose of this paper is to compare B.P.M. practice in Slovenia and Serbia in order to formulate recommendations for companies in transition economies. The survey was carried out in 115 representatives of Slovene companies and 91 Serbian companies in the year 2014. The conclusions and recommendation for B.P.M. implementation in transition economies were drawn upon similarities in B.P.M. practice between Serbian and Slovenian companies. In addition, the differences in B.P.M. practice were analysed in order to identify the ways one country can learn from the experience of the other. The results from Slovenia and Serbia from 2014 are interesting for both countries from the perspective of how B.P.M. practice could be further developed in Slovenia and Serbia. The findings have significant managerial implications, as they will help managers to better understand the key factors for successful B.P.M. implementation transitional countries companies.

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1. Introduction

Today, there is declining number of customers who make the decision to buy products/services solely on price. Cost, quality, delivery speed and reliability play a decisive role in selecting product and/or service (Simeunović, Tomašević, Stojanović, Radović, & Slović, 2012). Stojanović, Simeunović, and Radović (2012) stated that 'constant intensification of global competition and market demand increase force all business systems to find new ways of preserving and improving its competence and achieve advantage on market in terms of prices, deadlines, quality goods and services' (p. 205). Madison (2005) considers that '85% of

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all problems in the company can be attributed to processes, and 15% to people, and solving problems in processes may lead to customer satisfaction improvement, cost and cycle time reduction' (p. 3). Radović, Tomašević, Stojanović, and Simeunović (2012) emphasise that business processes are of a great importance for a business system, because they represent the foundation for business system development, analysis, improvement and management of its parts and the system as a whole.

Business processes have drawn a great deal of attention from industrial practitioners and academic researchers since the early 1990s because of their great potential for improving the efficiency and effectiveness of organisations (Xiang, Archer, & Detlor, 2014). It has been recognised that business process management (B.P.M.) plays a central role in creating sustainable competitive advantage (Broadbent, Weill, & Clair, 1999), as empirical research suggests a positive correlation between B.P.M. and business success (McCormack et al., 2009).

B.P.M. is without doubt a core task of organisational design in modern business (Sidorova & Isik, 2010). It is described as 'a way of life for organisations' (Rummler-Brache Group, 2004) as it has become a key element of both strategic and operational management (Rosemann & de Bruin, 2005). B.P.M. aims at both the development of innovative solutions to complex business problems and the creation of new opportunities for competitive differentiation (Niehaves, Poeppelbuss, Plattfaut, & Becker, 2014).

In the transition economies, the main problem is that many companies are not viable, i.e., not able to earn a socially acceptable profit in an open, competitive market even if they are under normal management, because they are in sectors that are inconsistent with their economies' comparative advantages (Lin, 2005). It can be said that competitive advantage and profit are the focus of transitional economies.

Considering the influence B.P.M. implementation might have on gaining competitive advantage, B.P.M. stands out as a viable solution for improving company performance in transition economies. In addition, there is a small number of papers which are related to B.P.M. practice in transitional countries, mainly focused on measurement of business process outsourcing (Kumar, Lavassani, Kumar, & Movahedi, 2008; Škrinjar, BosiljVukšić, & Indihar Štemberger, 2010). Therefore, it is interesting to analyse further B.P.M. practice in transitional economies which is the main purpose of this article. Transition usually covers Central and East Europe, and empirical study was conducted in two countries: Slovenia as E.U. member and Serbia as candidate for E.U. membership. Slovenian and Serbian companies can be considered late adopters of B.P.M. practices compared to other western economies.

This paper analyses B.P.M. practice in two transition economies, namely Slovenia and Serbia, in order to identify possible similarities and differences between the two countries and to set recommendations for further implementations.

The article is organised as follows: next section provides theoretical background about processes and B.P.M. practice, and third section describes research methodology. Results and discussion are given in fourth section followed by recommendations, implications, limitations and direction for further research.

2. Theoretical background

B.P.M. and process improvement are important themes for researchers and practitioners, because process improvement represents bottom-line of business enhancement (Siha &

Saad, 2008, p. 778). Lientz and Rea (2001) stated that 'company profitability depends on processes' (p. 15).

There are many definitions of B.P.M., and one of the important elements is how companies in transition economy understand B.P.M. B.P.M. is defined as an integrated management philosophy and set of practices that includes incremental change and radical change in business processes, and emphasises continuous improvement, customer satisfaction and employee involvement (Houy, Fettke, & Loos, 2010; Hung, 2006). B.P.M., popularised in the early 1990s, is considered as the analysis and design of work flows and processes within and between organisations for achieving radical performance improvements (Davenport & Short, 1990). It can be considered as a specific capability dedicated to process improvements and, or more broadly, to organisational change (Teece, Pisano, & Shuen, 1997; Trkman, 2010). Jeston and Nelis (2006) define B.P.M. as 'achievement of organisational objectives, through the improvement, management and control of essential business processes', and emphasise that 'process management is an integrated part of "normal" management'. Therefore, the first part of the research is dedicated to ways in which companies understand B.P.M. and how they describe level of interest for process improvements.

The popularity of business process focused research can be traced back to business process reengineering, promoted by Hammer and Davenport (Davenport, 1993; Hammer & Champy, 1993), that described it as a radical redesign of business processes resulting in a singular transformation (Xiang et al., 2014). However, researchers soon realised that better results were obtained when organisations started with a revolutionary design phase, followed by actually implementing changes in an evolutionary manner (Jarvenpaa & Stoddard, 1998). Later on, a more general term B.P.M. was widely adopted by many researchers in the business process focused research context. B.P.M. covers concepts such as total quality management, business process reengineering, business process redesign (B.P.R.), business process improvement (B.P.I.), etc. (Xiang et al., 2014).

Although extensive research has been carried out in the B.P.R. area, a recent article has shown a continuing increase in interest in this field (Houy et al., 2010). One of the reasons for this interest is probably the failure rate of B.P.R. projects which still remains high (Žabjek, Kovačič, & Indihar Štemberger, 2009). Research shows that a large number of B.P.M. programmes and projects fail (Trkman, 2010), with some researchers reporting failure rate of 60–80% (Bai & Sarkis, 2014). Furthermore, the increased interest in this field implies that there are limitations in existing research results. For example, studies that do exist tend to be case study reports, making it difficult to generalise findings that yield consistent results (Bradley, 2008). Many previous studies have carefully examined the readiness of an organisation to embark on a B.P.R. project (Abdolvand, Albadvi, & Ferdowsi, 2008; Aghdasi, Albadvi, & Ostadi, 2010; Fenelon, 2002) or to adopt B.P.M. (Buh, Kovačić, & Indihar Štemberger, 2015; Hribar & Medling, 2014; Škrinjar et al., 2010), but there are few studies oriented to B.P.M. in transition economies.

The relationship between managing business processes and their effect on company performance and success has been studied in much research to date (Guha & Kettinger, 1993; Hammer & Champy, 1993; Jeston & Nelis, 2008; McCormack et al., 2009; Škerlavaj, Indihar-Štemberger, Škrinjar, & Dimovski, 2007; Strnadl, 2006; Trkman, 2010; Trkman, Mertens, Viaene, & Gemmel, 2015; Van der Aalst, Ter-Hofstede, & Weske, 2003; Xiang et al., 2014). Up to date only a few authors have studied managerial practice in the field of transition countries (Gošnik, Beker, & Kavčič, 2014; Gošnik, Hohnjec, & Mihić, 2010;

Gošnik, Pofuk, & Kavčič, 2015; Simeunović et al., 2012; Škerlavaj et al., 2007; Trajković, Obradović, & Gošnik, 2010; Stojanović et al., 2012a). According to various authors (Guha & Kettinger, 1993; McCormack & Johnson, 2001; McCormack et al., 2009; Škerlavaj et al., 2007; Strnadl, 2006) it has been recognised that B.P.M. plays a central role in creating sustainable competitive advantage as empirical research suggests a positive correlation between process management and business success. No study so far has studied the management resistances in B.P.M. implementation and established correlation between ownership of the company and the interest of management to implement B.P.M. in the transition countries and companies.

Skalle, Ramachandran, Schuster, Szaloky, and Antoun (2009) emphasised that one of the areas that are in focus of B.P.M. is business process design and improvement in order to fulfil or exceed customer expectation, while achieving organisational goals. Process improvement is one of the important parts of B.P.M. and is recognised as one of the main priorities for companies, according to Gartner survey from 2009 (Zellner, 2011). B.P.I. was one of the sources of competitive advantage, and is a necessity for survival on the market (Stojanović, Simeunović, & Tomašević, 2012a). One of the shortcomings of B.P.M. is long duration of implementation. Companies cannot wait long to see the results, so they need to define improvement projects which will achieve and show results quickly. These projects can be key drivers for successful B.P.M. deployment. One part of the survey is dedicated to process improvements as part of the B.P.M. in order to comprehend success factors for process improvements in transition economies.

Based on previous research on this field (Gošnik et al., 2010, 2014, 2015; Simeunović et al., 2012; Stojanović et al., 2012; Trajković et al., 2010) the main goal of this research is to evaluate level of B.P.M. practice and to investigate what are drivers, challenges and trends for process work in Serbia and Slovenia in the last period, and to propose further efforts in process management and improvement practice which can be useful for practitioners and researchers on this field, with the emphasis on transition economies.

3. Research methodology

Transition countries and companies in these economies have a unique history. These companies have been a part of a relatively closed economy with strong orientation in local market. There was no need to use modern management concepts because all these companies were exposed only to local competition. Since many transition countries from 1990s have accepted democracy and open economy model, they were forced to compete in global markets. It is also the ownership of these companies that has changed. In this regard, the need for modern managerial concept such as B.P.M. has been recognised as useful for business process optimisation. Management in these companies is under market requirements and company owners are forced to use B.P.M. tools. Implementation of B.P.M. is related with resistance which occurs in management and is related to the success of the B.P.M. initiatives and company efficiency as well as success. This study researches the effect of company ownership and management resistance in B.P.M. implementation in the case of transition countries.

B.P.M. is becoming a popular managerial tool, which is also used in the transition countries. Slovenia and Serbia are the most representative ex-Yugoslav transition countries and have many similarities: strong production-oriented economies (mechanical engineering,

automotive industry, electric engineering and service sectors. Companies in both countries are strongly connected with the European automotive industry, and cooperation between the two economies is very intense, with many Slovenian and Serbian companies having already adopted B.P.M. concepts. We have decided to study Slovenia and Serbia because:

(1) They are both former socialist countries (ex-Yugoslav republic) and similar economies in transition.
(2) The institutional phase of the socio-political transition has been completed, but the socio-economic transition has not.
(3) Numerous collaborations were established during the time of Yugoslavia, providing domestic supplies based on trade in goods with foreign partners. Some foreign partners expressed huge interest in trading on the Yugoslav market. Resistances to change in the companies in this study have origin in common cultural, political and social background of both countries. This topic hasn't been studied yet.
(4) Slovenia and Serbia as economies have challenges such as: decreasing the state debt; certain progress in Slovenia and in Serbia on the field of reforms and restructuring; both countries have established an asset management company, into which banks (primarily state-owned (banks) have transferred distressed assets; both countries are interested in foreign investments and to attract foreign investors; privatisation in public sector is taking place; interest is also to speed up corporate restructuring; companies in private ownership have to pay off credits from the past; access to new credits and company growth is much more restrictive; so internal resources and optimisation in the companies must take place (which include process optimisation, internal growth, increase of productivity in the state owned and private owned companies is urgent, which is all related with the use of B.P.M. tools). So, findings in this research can help potential foreign investors at better decisions at entering these markets at entering in the ownership in the companies in transition countries.

There are many similarities between Slovenia and Serbia, but there are also differences. Slovenia had entered in the transition period earlier and was exposed to B.P.M. practice before Serbia. So, it is interesting to analyse is there any differences in B.P.R. practice in those countries.

Research questions in our research are:

(1) How companies in transition economies understand B.P.M.?
(2) What are drivers and challenges for B.P.M. in transition economies?
(3) What is the future of B.P.M. in transition economies?

In order to analyse possible differences between two countries and to answer the research questions, survey instrument was developed. Questions concerning respondents, the driver and challenges, implemented process initiatives and process maturity were adapted from a B.P.Trends survey (Wolf & Harmon, 2012), while questions concerning process improvement practice were taken from a Process Excellence Network survey (Process Excellence Network, 2012). Questions concerning respondents industry, company's ownership and business process and improvement methodology selection were added by the authors. A similar instrument was used for surveying B.P.M. implementation in Serbian companies in 2012 (Stojanović, Simeunović, & Tomašević, 2012b), with the addition of questions regarding B.P.I. practice. Questionnaire included 28 questions divided into three groups:

(i) general questions about company, respondents and understanding B.P.M., (ii) questions about process maturity and (iii) questions referring to B.P.I. practice. The questions required single or multiple choices, while some of them included an open form in case when offered answers couldn't reflect the views of the respondents.

Empirical research was limited to managers, chief executive officers and process analysts in the Republic of Serbia and the Republic of Slovenia. With the help of chambers of commerce from both countries, we obtained the initial list of potential respondents. The population in Serbia included companies which have implemented International Standards Organisation (I.S.O.) standards. The population in Slovenia involved companies which have been implemented I.S.O., Six Sigma and lean methodologies. By doing this we have tried to ensure that respondents have at least some experience with B.P.M. The population in Serbia were 674 active companies, from which we received responses from 86 companies, which is adequate on the level of confidence interval of 10%. In Slovenia, the database of companies included in Slovenian Society for Operational excellence was used. There were 205 active companies. With the help of highly involved researcher within the society, we collected 115 responses, which is adequate on the level of confidence interval of 6%. Anonymous empirical research was limited to top and middle managers, process analysts, and operational excellence managers in Slovenia and Serbia. The web survey was active until we didn't receive a balanced sample according to the size of the companies. Same procedure was followed in Slovenia and in Serbia.

A cover letter and invitation to participate in the study and a link to the web survey was then sent via e-mail to chosen addresses. A total of 115 usable responses in Slovenia were returned, resulting in a response rate of 57.5%, while the success rate in Serbia was much lower, resulting in a response rate 17.6% (89 usable responses returned). The data were gathered in the period from September to December 2014. The survey was anonymous and respondents decided to participate voluntarily.

The web survey was active until we received a balanced sample according to the size of the companies. Same procedure was followed in Slovenia and in Serbia.

After the questioners were filled by the participants, the statistical package S.P.S.S. was used for analysing the results. Calculation of frequencies and χ^2 test (with significance set to 0.05) were used for analysing the interconnection between different practices and challenges and for testing statistical differences between results in Slovenia and Serbia. The likelihood ratio 2Î was used as an alternative to Pearson's χ^2 test. This method is preferred with small samples, or when assumptions (small expected frequencies in more than 20% of cells) for executing χ^2 test are not met. When 2×2 contingency tables were produced we applied Yates's continuity correction (CC) on Pearson's chi-square test statistics in order to produce non biased significance values (Field, 2009, p. 690). Graphical materials were processed using Microsoft Excel software.

4. Results

Information about respondents regarding their job function, company size, orientation, ownership and industry sector are given in the following table (Table 1).

The majority of respondents in both countries are functional/department managers. This can be attributed to the fact that B.P.M.-related issues are relatively new to companies operating in Serbia and Slovenia. That is why the majority of companies assign functional/

Table 1. General information about companies and respondents.

		Serbia	Slovenia
Elements	Values	%	
Job function	General managers	9.9	5.2
	Executive officers	8.8	2.6
	Business function/department managers	22.0	30.4
	Business analyst	13.2	3.5
	Process analyst	14.3	7.0
	Consultants	12.1	3.5
	Researchers	8.8	13.0
	Something else	11.0	34.8
Companies size	Large (>250 employees)	47.3	36.5
	Middle (50–250 employees)	18.7	30.4
	Small (<50 employees)	34.1	33.0
Companies orientation	Manufacturing	19.8	33.0
	Service	59.3	48.7
	Manufacturing and service	20.9	18.3

Source: Authors research presented in the paper.

Table 2. Companies by industry.

	Serbia	Slovenia
Companies industry	%	
Heavy manufacturing	3.4	29.1
Light manufacturing	12.4	6.4
Financial services/insurance	11.2	8.2
Chemicals/energy/refineries	5.6	5.5
Computers/consumer, electronics/software	9.0	2.7
Education	5.6	8.2
Healthcare/medical equipment	5.5	5.5
Leisure/entertainment/travel	2.2	1.8
Professional/business services/consulting	16.5	4.5
Retail and wholesale	9.9	11.8
Telecommunications	6.6	1.8
Something else	12.1	14.5

Source: Authors research presented in the paper.

department managers to deal with process management issues. Respondents were mainly from large companies. This result is in line with the results of similar research, since B.P.M. is more likely to be implemented in large companies (Wolf & Harmon, 2014).

Table 2 shows data on sectors in which the research was conducted.

Respondents from Serbia were mainly from retail and wholesale, light manufacturing and financial sectors. B.P.M. is very popular in the financial sector in general; a large number of early B.P.M. adopters come from this sector (Wolf & Harmon, 2014).

The respondents were asked to express their view on how their company understands the term 'business process management'. Figure 1 presents the comparison between Serbian and Slovenian companies of the way the respondents understand the term 'business process management'.

Figure 1 shows that respondents mostly indicated that their organisations understand B.P.M. as a systematic approach to process analysis, improvement, redesign and management (32.2%) or managing an organisation by managing its business processes (26.1%). Initiatives for cost saving and process improvement of certain processes are also represented in 22.6% of replies. Similar to results in Slovenian companies, companies in Serbia indicated that they understand B.P.M. as a systematic approach to process analysis, improvement, redesign

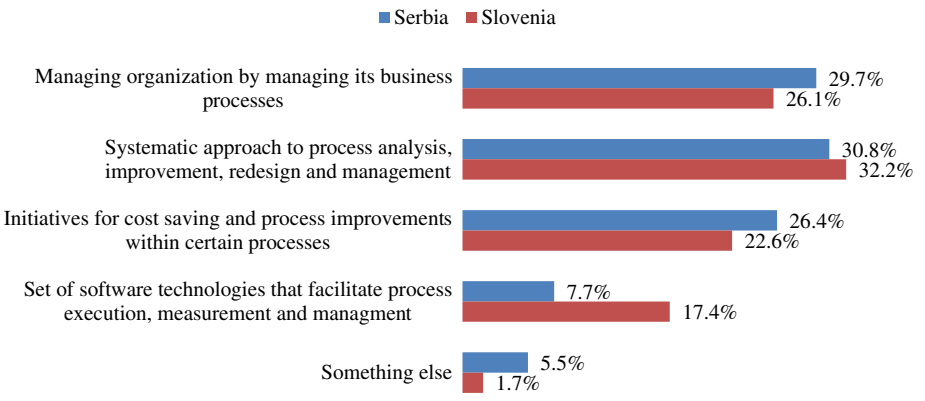

Figure 1. Companies' understanding of Business process management concepts. Source: Authors research presented in the paper.

and management (30.8%), or managing an organisation by managing its business processes (29.7%). Differences in results are recognised in understanding B.P.M. as an information technology (I.T.) concept, where 7.7% of Serbian companies chose the answer. Generally speaking, the differences between countries are relatively small, resulting in a non-significant difference between Serbia and Slovenia ($2\hat{I}(4) = 6.541$, $p = 0.162$), meaning that the B.P.M. is handled consistently in both countries without great deviations.

The research analysed issues concerning business process maturity in companies operating in Serbia and Slovenia. Table 3 shows the results of this analysis.

The majority of companies in Serbia and Slovenia stated that they are undertaking activities concerning process maturity 'in some cases'. An exception can be found in Slovenia where companies stated either that skills needed for activities are neither defined nor documented (43.5%) or always defined and documented within the company (38.3%). In the case of Serbia, however, skills needed for activities are neither defined nor documented in 12.1% of cases. Other obvious discrepancies between Serbia and Slovenia are in the statement that I.T. support is always in accordance with business processes. While this can be relatively true for Serbian companies (33,0%), in Slovenian companies the I.T. support is only in some cases (74.8%) in accordance with business processes. The difference between countries is statistically significant ($\chi^2(2) = 8.145$, $p = 0.017$). Same is true with the statement 'Managers are trained for analysis, design and business process management' ($\chi^2(2) = 7.836$, $p = 0.020$).The majority of the companies in Serbia (57.1%) and in Slovenia (60.9%) agree with this statement in some cases. However, 17.6% of companies in Serbia never train their managers for analysis, design and B.P.M., while this percentage in Slovenia is much lower (7.8%). In other categories, statistically significant differences are not present.

On average Slovenian companies ($M = 3.4$, $s = 1.79$) employ more drivers for business process change initiatives in their everyday practice compared to Serbian companies ($M = 3.2$, $s = 1.85$), however the difference is not statistically significant ($t = -0.605$, $p = 0.546$).

Comparison of main drivers behind business process change initiatives identified among companies operating in Serbia is given in Table 4 (multiple answers were allowed).

The main driver for business process change in Serbia is the increased productivity or efficiency of work (72.5%), followed by the need for cost saving (50.5%), increased market share (44.0%), need for customer satisfaction (37.4%), quality management system

Table 3. Questions concerning process maturity (%).

Questions concerning process maturity	Serbia	Slovenia	Serbia	Slovenia	Serbia	Slovenia
	Never		In some cases		Always	
Business processes documented and updated	6.6	1.7	53.8	60.0	39.6	38.3
Business processes measured and monitored	11.0	7.8	48.4	53.9	40.7	38.3
Core business process models include activities of suppliers and partners	25.3	30.4	57.1	55.7	17.6	13.9
IT support in accordance with business processes*	8.8	8.7	58.2	74.8	33.0*	16.5*
Skills needed for activities are defined and documented	12.1	43.5	58.2	18.3	29.7	38.3
Managers are trained for analysis, design and business process management*	17.6*	7.8*	57.1	60.9	25.3	31.3
Process managers use data about performances in order to manage processes	16.5	7.0	60.4	67.0	23.1	26.1

*Statistically significant difference between countries.
Source: Authors research presented in the paper.

Table 4. Drivers for business process change initiatives.

Drivers employed for business process change initiatives	Serbia %	Slovenia %
Savings/less costs, scrap, etc.	50.5	62.6
Increased productivity/efficiency of work	72.5	67.8
Improved products/greater competitiveness	30.8	36.5
Need for customer satisfaction improvement	37.4	56.6
Increased market share	44.0	26.1
Risk management	13.2	16.5
One-time events (reorganisation/mergers/acquisitions)	6.6	7.8
Q.M.S. certification	31.9	21.7
Need for managing I.T. resources (E.R.P./C.R.M.)	9.9	12.2
Business partner's requirements	6.6	13.9
Adjustments to the new regulations	18.7	16.5

*Statistically significant difference between countries.
Source: Authors research presented in the paper.

(Q.M.S.) certification (31.9%), the need for product improvement and greater competitiveness (30.8%). The ranking within Slovenian companies went from the increased productivity or efficiency of work (67.8%), followed by the need for cost saving (62.6%), need for customer satisfaction (56.6%), the need for product improvement and greater competitiveness (36.5%), increased market share (26.1%), Q.M.S. certification (21.7%) and others. Statistically significant differences between countries are present in the drivers concerning need for customer satisfaction ($CC(1) = 6.750$, $p = 0.006$) and increased market share ($CC(1) = 6.456$, $p = 0.011$). In Serbian companies, 37.4% recognise the need for customer satisfaction as an important driver for business process changes, while the percent in Slovenia is much higher, up to 56.6%. Another substantial difference with the increase of market share is that 44.0% of Serbian and only 26.1% of Slovenian companies recognise it as an important driver for business process change.

One of the aims of this research was to investigate the challenges and resistance encountered while trying to broaden business process initiatives. The results are in Figure 2.

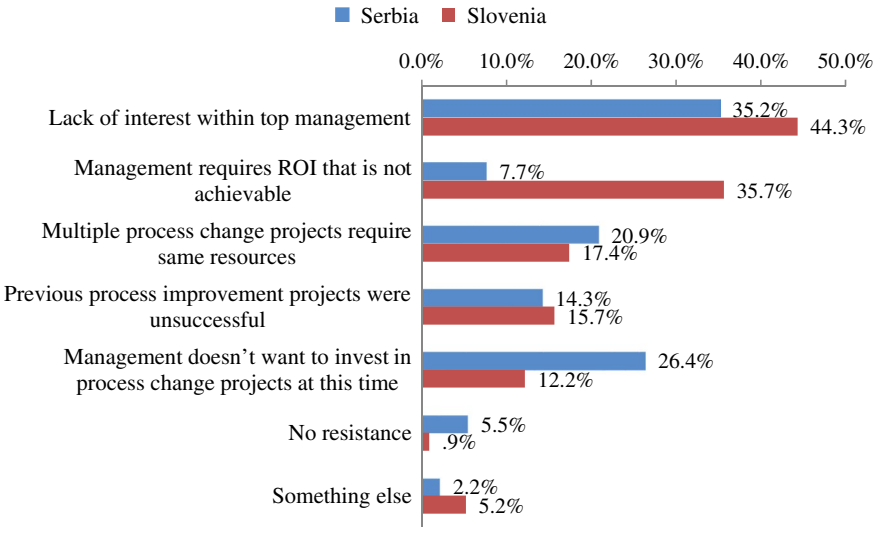

Figure 2. Comparison of challenges and resistance encountered while trying to broaden business process initiatives. Source: Authors research presented in the paper.

The main challenge in companies both in Serbia and in Slovenia is the lack of interest within top management, followed by management that does not want to invest in process change projects at this time in Serbia, and management that requires return on investment (R.O.I.) that is not achievable in Slovenia. This particular requirement is more obvious within Slovenian companies (41), compared to seven Serbian companies that stated so. In Serbia, five companies stated that they have not encountered any type of resistance.

The third part of the survey contained questions regarding B.P.I. With regard to process initiatives that companies have undertaken the comparison of the results are shown in Table 5 (multiple answers were allowed).

The majority of companies in Serbia have implemented and worked so far on B.P.M. (59.3%), B.P.M. system development (53.8%) and business process architecture development (51.6%). About one third of companies indicated that they have worked on core processes redesign (35.2%) or process automation projects (36.3%). Incremental process improvement initiatives are implemented to a lesser extent. In Slovenia, companies have implemented and worked so far mainly on the B.P.M. (55.7%), modelling/documenting processes (49.6%) and business process measurement system development (47.0%). One quarter of companies in Slovenia indicated that they have implemented and worked so far on core processes redesign (25.2%) and process automation (25.2%). Business process architecture development (21.7%) and process manager training for process analysis/redesign (20.0%) were also mentioned by one fifth of the respondents. The difference between countries is statistically significant in 6 out of 13 cases.

A majority of companies in Serbia reported that B.P.M. is part of everyday practice (50.5%) compared to 2.6% of companies in Slovenia, while a majority of companies in Slovenia stated that the efforts and results management processes are at the peak (49.6%), compared to 1.1% of companies in Serbia. Expanded interest is recorded mainly in Serbia (30.8%) and to a lesser extent in Slovenia (10.4%). In Slovenia 27.0% companies reported a lack of interest for any improvement, compared to 13.2% in Serbia. The difference between countries is statistically significant ($\chi^2(5) = 134.5$, $p = 0.000$).

Table 5. Comparison of process initiatives that companies have undertaken so far.

	Serbia	Slovenia
Business process initiatives undertaken so far	%	%
Business process architecture development*	51.6	21.7
Business process measurement system development	53.8	47.0
Modelling/documenting processes	64.8	49.6
Business process management	59.3	55.7
Process managers training for process analysis/redesign	15.4	20.0
Core processes redesign	35.2	25.2
Redesign of processes with reference models*	3.3	13.0
Six Sigma improvement projects	3.8	12.2
Lean improvement projects*	8.8	5.5
Lean Six Sigma improvement projects*	4.4	18.3
Continuous process improvement projects/Kaizen*	12.1	11.3
Process automation projects	36.3	25.2
Process excellence concepts*	5.5	12.2

*Statistically significant difference between countries.
Source: Authors research presented in the paper.

Table 6. Process initiatives that companies plan to undertake in the following period.

	Serbia	Slovenia
Process initiatives that companies plan to undertake in the following period	%	%
Business process architecture development*	22.0	33.0
Business process measurement system development	25.3	30.4
Modelling/documenting processes	23.1	27.0
Business process management	26.4	27.8
Process managers training for process analysis/redesign	25.3	26.1
Core processes redesign	36.3	26.1
Redesign of processes with reference models*	15.4	17.4
Six Sigma improvement projects	9.9	24.3
Lean improvement projects*	12.1	29.6
Lean Six Sigma improvement projects*	11.0	26.1
Continuous process improvement projects/Kaizen*	13.2	23.5
Process automation projects	18.7	26.1
Process excellence concepts*	6.6	24.3

*Statistically significant difference between countries.
Source: Authors research presented in the paper.

Companies in Serbia plan to undertake projects regarding Core processes redesign (36.3%), and will continue to work on the B.P.M. (26.4%), business process measurement system development (25.3%) and process manager training for process analysis/redesign (25.3%) in the near future. In Slovenia, business process architecture development is the first priority (33.0%), followed by business process measurement system development (30.4%) and lean improvement projects (29.6%). Compared to Serbia, the percentage of companies that have undertaken business process initiatives so far and companies that plan to use business process initiatives in the future is higher within Slovenian companies. The difference between countries is statistically significant in most cases (Table 6).

Companies that reported expanding interest for process improvement were so far engaged in following business process initiatives: modelling/documenting processes (14 companies), business process architecture development (11 companies) and B.P.M. (12 companies). In Slovenia, only 12 companies reported an expanding interest for process improvement (Table 7).

Table 7. Process initiatives undertaken so far by companies with expanding interest in process improvement.

	Serbia (n=28)	Slovenia (n=12)
Business process initiatives undertaken so far	No. of companies	No. of companies
Business process architecture development	11	1
Business process measurement system development	9	4
Modelling/documenting processes	14	4
Business process management	12	3
Process managers training for process analysis/redesign	4	2
Core processes redesign	6	2
Redesign of processes with reference models	0	1
Six Sigma improvement projects	0	1
Lean improvement projects	3	1
Lean Six Sigma improvement projects	0	2
Continuous process improvement projects/Kaizen	2	1
Process automation projects	8	1
Process excellence concepts	0	1

Source: Authors research presented in the paper.

Table 8. Future process initiatives planed by companies with expanding interest in process improvement.

	Serbia (n=28)	Slovenia (n=12)
Business process initiatives planed for the future	No. of companies	No. of companies
Business process architecture development	8	6
Business process measurement system development	12	3
Modelling/documenting processes	12	3
Business process management	13	5
Process managers training for process analysis/redesign	5	2
Core processes redesign	12	2
Redesign of processes with reference models	7	1
Six Sigma improvement projects	1	3
Lean improvement projects	3	3
Lean Six Sigma improvement projects	3	2
Continuous process improvement projects/Kaizen	4	1
Process automation projects	7	2
Process excellence concepts	1	2

Source: Authors research presented in the paper.

These companies plan to implement B.P.M. (28 companies in Serbia and 12 in Slovenia), and will continue to work on process modelling, B.P.M. and business process measurement system development. Companies with expanding interest in B.P.I. also have core process redesign in their plans (Table 8).

Companies in Serbia that have process improvement as a part of their normal work environment have so far implemented following initiatives: modelling/documenting processes (37 companies), B.P.M. (36 companies), business process measurement system development (34 companies), and business process architecture development (31 companies). In Slovenia, on the other hand, all three companies stated that modelling/documenting processes initiative was undertaken so far (Table 9).

A majority of companies stated that they were engaged in B.P.I. for 2–5 years in Serbia (36.3%), and 40.9% in Slovenia. In Serbia, one third of companies reported that they have worked more than five years on process improvements (34.1%) compared to 33.9% in Slovenia. In Serbia and Slovenia around 18.0% of the companies stated that they have been engaged in B.P.I. for less than two years. In Serbia, 11.0% of companies had yet to start

Table 9. Process initiatives undertaken so far by companies where B.P.M. was part of the normal work environment.

	Serbia (n=46)	Slovenia (n=3)
Business process initiatives undertaken so far	No. of companies	No. of companies
Business process architecture development	31	0
Business process measurement system development	34	1
Modelling/documenting processes	37	3
Business process management	36	1
Process managers training for process analysis/redesign	9	0
Core processes redesign	24	0
Redesign of processes with reference models	2	0
Six Sigma improvement projects	3	0
Lean improvement projects	5	0
Lean Six Sigma improvement projects	3	0
Continuous process improvement projects/Kaizen	8	1
Process automation projects	20	0
Process excellence concepts	5	1

Source: Authors research presented in the paper.

Table 10. Business process improvement initiatives segments.

	Serbia (n=91)	Slovenia (n=115)
The focus of business process improvement initiatives	%	%
Supply chain/suppliers	16.5	13.0
Implementation of the service to users*	25.3	41.7
Production	30.8	40.9
IT	30.8	29.6
Human resources	16.5	24.3
Finance*	20.9	36.5
Sales	27.5	28.7
Research and development*	14.3	27.0
Marketing	15.4	26.1
In all areas	25.3	31.3
Other	2.2	1.7

*Statistically significant difference between countries.
Source: Authors research presented in the paper.

B.P.I., compared to 7.0% of companies in Slovenia. The difference between countries is not statistically significant ($\chi^2(1) = 1.228$, $p = 0.746$), meaning that Serbian and Slovenian companies are coherent in deciding the right moment to engage in B.P.I.

Table 10 shows that the focus of B.P.I. initiatives in Serbia is mainly on production/operations (28 companies) and I.T. business unit (28 companies), while in Slovenia the focus is on implementing the service to users (48 companies) and production (48 companies). The difference between countries is not statistically significant within three major sectors: implementation of the service to users ($\chi^2(1) = 5.390$, $p = 0.020$), finance unit ($\chi^2(1) = 5.237$, $p = 0.022$) and research and development unit ($\chi^2(1) = 4.131$, p0.042).

According to the survey, 23 companies (25.3%) in Serbia and 36companies (31.1%) in Slovenia reported that they apply B.P.I. methodologies in all areas of the company.

In accordance with expansion of application of B.P.I. in companies, majority of the respondents reported company-wide improvement projects (around 35% in both countries), or projects focused on some organisational units or departments (around 30% in both countries). Although the differences between the countries are not statistically significant ($\chi^2(3) = 3.983$, $p = 0.263$), some discrepancies could be noticed. In Serbia 19.5% of companies apply small improvement pilot projects, while in Slovenia this percent goes up to 26.5%.

The majority of the companies stated that their process improvement project duration is between 6 and 12 months (20.9% in Serbia and 26.1% in Slovenia), while 18.9% reported that average project duration is between 3 and 6 months (15.4% in Serbia and 21.7% in Slovenia) or less than 3 months (15.4% in Serbia and 18.3% in Slovenia). Companies whose process improvement project duration is more than a year account for 13.6% (12.1% in Serbia and 14.8% in Slovenia). The differences between the countries are not statistically significant at 0.05 level ($\chi^2(4) = 7.767$, $p = 0.100$).

The survey shows that 40.6% of the companies expect that the number of employees dedicated to process improvement will increase (46.2% in Serbia, 36.0% in Slovenia), and 47.0% stated that the number of employees will remain the same (41.8% in Serbia, 51.4% in Slovenia). Only 12.4% said that this number will decrease in the future (12.1% in Serbia, 12.6% in Slovenia). The situation is similar with budget for process improvement programmes. The differences between the countries are not statistically significant neither for future human resource management ($\chi^2(2) = 2.251$, $p = 0.325$), neither for future budget plans ($\chi^2(2) = 1.449$, $p = 0.484$).

While a majority of companies in Slovenia stated that the efforts and results regarding B.P.M. are at their peak (49.6%), only 1.1% of respondents from Serbia identified efforts as being at its peak. Expanded interest for process improvement is recorded mainly in Serbia (30.8%) and less in Slovenia (10.4%). In Slovenia 27.0% companies reported a lack of interest for any improvement, compared to 13.2% in Serbia. The difference between countries is statistically significant ($\chi^2(5) = 134.5$, $p = 0.000$).

Among the companies that have deployed B.P.I. initiatives, 28.6% of companies operating in Serbia reported that their B.P.I. programme was successful, while 36.5% of companies operating in Slovenia reported a success. On the other hand, 24.2% of companies operating in Serbia consider their programmes to be unsuccessful, while 12.2% of companies operating in Slovenia reported failure. The difference between countries is not statistically significant ($\chi^2(4) = 6.665$, $p = 0.155$). Survey shows that 46.5% of companies which report that they were successful in B.P.I. programme were engaged with the programme for more than a year.

5. Discussion

Serbian and Slovenian companies understand B.P.M. as a systematic approach to process analysis, improvement, redesign and management. Differences between countries are relatively small, resulting in a non-significant difference between Serbia and Slovenia, meaning that the B.P.M. is handled consistently in both countries without great deviations. The same understanding of B.P.M. in two countries is a good basis for comparing the results, because different views on B.P.M. can lead to differences in implementation of B.P.M. In this research, the understanding of B.P.M. is not a base for statistical difference between results. These results are in line with similar research conducted among companies in America and Europe (Wolf & Harmon, 2014).In addition, the results show greater understanding of strategic importance of B.P.M. in transitional economies compared to the results of similar research (Škrinjar et al., 2010). However, the results of the research should be approached with caution, given the fact that strategic impact of B.P.M. might be understood differently among companies.

Drivers for business process change were different between the countries. Slovenian companies pay more attention to the customer satisfaction and market share than Serbian

companies do. Serbian companies are also more oriented to Q.M.S. certification than Slovenia companies. This result can be attributing to increased popularity of Q.M.S. in Serbia during the past two decades, while Slovenia was among the early adopters of Q.M.S. certification. Although there are differences between Slovenian and Serbian respondents the results show that companies from both countries diverge from B.P.M. drivers that are consider important by companies in developed countries, which are more oriented toward cost reduction and productivity improvement through B.P.M. This can be so to the fact that companies from developing countries still have limited access to global market. This results in different priorities with companies from developed and transition economies, where former try to maintain their market position through efficiency improvement while latter are trying to penetrate global market by fulfilling formal prerequisites (i.e., Q.M.S. certification) or by focusing on improving effectiveness (i.e., customer satisfaction).

The main challenge in companies both in Serbia and in Slovenia is the lack of interest within top management. Companies in Serbia are also facing with management's lack of interest to invest in process change projects at this time, which can be attributed to different priorities in transition economies. On the other side, Slovenian managers often require R.O.I. that might not be achievable.

Companies from developed countries mainly have the challenge of multiple process change efforts competing for the same resources or lack of interest within top management (Wolf & Harmon, 2014). We can say that challenges are the similar in companies that want to spread B.P.M. implementation. In order to solve this problem, companies in Serbia can learn from Slovenian experience, and streamline their process change efforts to customer satisfaction and market share. The main cause of B.PI. programme failure in both countries is lack of interest within top management.

The results show that more companies in Serbia deal with business process architecture development, process modelling and process measurement than in Slovenia. These practices contributed to the expanding interest in process improvement and to the fact that B.P.M. is a part of normal work.

Serbian companies worked more on business process architecture development, implementation of lean and Kaizen projects than Slovenian companies did. On the other hand, Slovenian companies worked more on Redesign of processes with reference models and lean Six Sigma improvement projects. These projects established a foundation for future business process initiatives. This is why it is no surprise that these companies are expecting for process improvement to become part of everyday efforts for business improvement. This is to be expected, since companies in transition economies do not have a lot of money at their disposal for funding B.P.I. efforts, while continuous process improvement initiatives require less financial resources and are usually focused on more rational utilisation of existing resources.

Regarding the engagement of two countries with B.P.I., Serbian and Slovenian companies were coherent in deciding the right moment to engage in B.P.I.

The focus of B.P.I. initiatives in Serbia is mainly on production/operations (28 companies) and I.T. business units (28 companies), while in Slovenia the focus is on implementing the service to users (48 companies) and production (48 companies). Continuous process improvement is traditionally focused on operations. However, there is a trend of shifting continuous process improvement practices toward service sector. By combining continuous improvement practices with I.T. knowledge, new process improvement concepts, such as lean I.T. and agile programming, emerged. This new body of knowledge made the I.T. sector

very appealing for process improvement initiatives, especially within service industries. On the other hand, Serbia should focus improvement initiatives more on service provision and research and development, much like Slovenian companies.

The majority of companies had company-wide deployments of process improvement initiatives, which reflects the fact that a majority of companies had worked on those improvements for more than 2 years.

The average process improvement project duration for both countries is between 6 and 12 months, but in Slovenia there is larger percentage of companies with an average duration of less than 6 months. These results are in accordance with similar research about B.P.I. (Process Excellence Network, 2012). A good direction for Serbian companies for the future would be to streamline their efforts on improvement projects with a duration of less than 6 month, since results might be obtained quicker, which might increase interest and obtain momentum for future improvement projects that might be of a greater scale.

Efforts and results of process management are regarded as having reached their peak in Slovenian companies, while Serbian companies experience an expanding interest for process management and improvement practice. Also, Slovenian companies have a larger number of successful process improvement projects and smaller process improvement project failure rate than Serbian companies, so Slovenia might be a good role model for other transitional countries to look upon.

6. Conclusion

The main goal of this study was to compare B.P.M. practice in Slovenia and Serbia in order to formulate recommendations for companies in transitional countries.

The contribution of this paper is twofold. Firstly, similarities in B.P.M. understanding, challenges, drivers and practices were identified in order to extract common guidelines for B.P.M. implementation that might be of use to any company operating in transitional economy. Secondly, the differences in B.P.M. implementation were identified, stressing the lessons that Slovenia and Serbia may learn from each other, that might facilitate journey for companies from both countries towards B.P.M. excellence.

The view of B.P.M. in companies operating in transition economies converge, where B.P.M. is seen as systematic approach to process analysis, improvement, redesign, and a way to manage a company by managing its business process. This view is in line with the perspective, which is dominant in developed countries, that stresses the importance of a holistic approach to B.P.M., with process improvement projects deployed at all levels of the company, with the aim of improving the entire business.

Secondly, the empirical results about B.P.M. practice success drivers differ between countries. Slovenian companies are more oriented towards customer satisfaction and market share in implementing B.P.M. practice while the main driver for B.P.M. in Serbia is Q.M.S. certification. This is understandable, since Slovenia was among early adopters of management system certification, while Serbia can be considered a late adopter of Q.M.S. certification. In addition, Slovenian companies have a longer tradition of cooperating with other companies on an open market, and Slovenia has a system that regulates the market in more detail, with many regulations being imposed by the E.U. In order to cooperate, foreign business partners often force Serbian companies to certify their Q.M.S. This is not necessarily a bad thing, since Q.M.S. certification can be seen as a good opportunity for a

company to improve its processes. However, this should only be a starting point, and companies should pursue goals that are higher than Q.M.S. certification, and streamline their efforts to customer satisfaction and market share, as is the case with Slovenian companies. However, both countries should focus more on improving efficiency through B.P.M., which might give a better starting position when competing in the global market.

The most significant challenge for process improvement is lack of interest within top management. Top management should be the driving force behind all change initiatives, which is why their support is of the outmost importance. In order to obtain this support, an aggressive education policy is needed, in order to present all benefits that B.P.M. might bring to companies. Strengthening business-academia connections should be one of key steps in this effort.

Companies in Slovenia and Serbia are often engaged in continuous process improvement efforts. This is the direction that should be pursued by companies in transitional economies, having in mind that continuous improvement usually doesn't require significant amount of financial resources, and first results can often be obtained in short period of time. In this way, companies can be encouraged by positive results obtained at a lower level of process improvement, and become ready to tackle greater projects regarding process improvement, such as core process redesign.

Companies in Serbia should also focus more on the Redesign with reference models, while Slovenian companies should focus more on the business process architecture development. Also, the process improvement initiatives in Serbia should focus more on the service provision and research and development, in order to develop further B.P.M. practice and get to higher level of process maturity. Companies in Serbia should streamline their efforts on small improvement projects with project durations of less than 6 months.

The findings in this paper show the experiences of B.P.M. practice in Slovenian and Serbian companies. Serbian companies can learn from Slovenian companies in order to improve B.P.M. practice and to pass painlessly thorough transition period. Further directions for implementation of B.P.M. in Serbia, based on the practice from its neighbour, can be used by other countries which are in a similar economic situation to Serbia, while their joint experience can be used by companies in all transitional economies.

The main limitation of this research is that it was conducted in only two countries. This limitation sets a course for further research, where more transitional countries would be included, thus strengthening the generalisability of the results. In addition, it would be beneficial to conduct research to directly compare B.P.M. practice in companies in developed countries and transitional countries, in order to obtain a precise insight into differences and similarities.

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